### PATENT COOPERATION TREATY

## **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference OZ 03053 WO-A	FOR FURTHER	RACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/0094		date (day/month/year)	Priority date (day/month/year) 22.08.2003
International Patent Classification (B23B27/16, B23C		nd IPC	
Applicant CERAMTEC AG			
under Article 35 and trans	mitted to the applicant accordin	g to Article 36.	International Preliminary Examining Authority
2. This REPORT consists of		sheets, including	ng this cover sheet.
3. This report is also accomp	panied by ANNEXES, comprising	ng:	•
•	plicant and to the International	***************************************	
I	ontaining rectifications authorize	-	amended and are the basis for this report and/or ule 70.16 and Section 607 of the Administrative
			nsiders contain an amendment that goes beyond d in item 4 of Box No. 1 and the Supplemental
	ternational Bureau only) a total	of (indicate type and numb	er of electronic carrier(s))
	in computer readable form only the Administrative Instructions).	as indicated in the Suppl	, containing a sequence listing and/or tables emental Box Relating to Sequence Listing (see
	ations relating to the following i	tems:	
Box No. I	Basis of the report		•
	Priority		
<del>_</del>	,	oith regard to novelty inver	ntive step and industrial applicability
	•	integard to hovery, have	and the strain approximity
Box No. IV Lack of unity of invention  Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement			
	Certain documents cited	5	
Box No. VII	Certain defects in the internation	nal application	
	Certain observations on the inte	••	
Date of submission of the demand		Date of completion of the	his report
Trace of Administration of the Comment			
Name and mailing address of the IP	EA/EP	Authorized officer	
Exesimile No		Telephone No.	

Translation

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/009411

Вох	c No. I	Basis of the report		
1.		ard to the language, this report is based on the internatio under this item.	nal application in the language in which i	t was filed, unless otherwise
		s report is based on translations from the original langua ch is the language of a translation furnished for the purp		
		international search (Rule 12.3 and 23.1(b))		
		publication of the international application (Rule 12.4	)	
		international preliminary examination (Rule 55.2 and/	for 55.3)	
2.	With regs receiving this repor	ard to the elements of the international application, this Office in response to an invitation under Article 14 ar (1):	report is based on ( <i>replacement sheets</i> w e referred to in this report as "originall <sub>,</sub>	thich have been furnished to the y filed" and are not annexed to
	$\overline{\square}$	international application as originally filed/furnished		
	the the	description:		
	pag			as originally filed/furnished
	pag			
	pag	es*	received by this Authority on	
	L the	claims:		
	zon	1-10		as originally filed/furnished
	nos	*	as amended (together with a	ny statement) under Article 19
	nos	*	received by this Authority on	
	nos	*	received by this Authority on	
	the	drawings:		
	she	ets		as originally filed/formshed
	she			
	she			
	ase	equence listing and/or any related table(s) see Supplem	ental Box Relating to Sequence Listing.	
_				
3.	L Inc	e amendments have resulted in the cancellation of:		
		the description, pages		
		the claims, nos.		
		the drawings, sheets/figs		<u></u>
		the sequence listing (specify):		
		any table(s) related to sequence listing (specify):		
4.		s report has been established as if (some of) the amend y have been considered to go beyond the disclosure as fi		
		the description, pages		<del></del>
		the claims, nos.		
		the drawings, sheets/figs		
		the sequence listing (specify):		
		any table(s) related to sequence listing (specify):		
<u> </u>	If item 4	applies, some or all of those sheets may be marked "sup-		

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/009431

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement					
1.	Statement				
	Novelty (	(N)		3, 8 .	
			Claims _	1, 2, 4-7, 9, 10	NO
	Inventive	step (IS)	Claims _		YES
			Claims _	1-10	NO
	Industria	l applicability	(IA) Claims	1-10	YES
			Claims _		
2.	Citations and	l explanations	(Rule 70.7)		
	1	·		es reference to the following	
		docume	_	to reference to the rorrowing	
		aocame			
		D1: V	NO 03/0159	68 A (SUMITOMO ELECTRIC INDUSTRIES)	
				y 2003 (2003-02-27)	
			and EP 143		
				961 (JAKOB LACH GMBH & CO KG)	
		2	. August 2	000 (2000-08-02)	
		D3: I	DE 102 08	266 A (CERAM TEC AG INNOVATIVE	
		(	CERAMI) 1.3	February 2003 (2003-02-13)	
		D4: V	NO 02/2642	8 A (GREENLEAF TECHNOLOGY CORP	
		1	(US)) 4 Ap	ril 2002 (2002-04-04)	
		D5: E	EP-A-0 571	914 (SUMITOMO ELECTRIC INDUSTRIES)	
		J	December	1993 (1993-12-01)	
		In thi	s report	the text references with regard to	
		D1 ref	er to doc	ument EP 1435271.	
	2	TNDEP	INDENT CLA	TM ] .	
	2.1	The pr	esent app	lication does not meet the	
		requir	rements of	PCT Article 33(1) because the	
		subjec	t matter	of claim 1 lacks novelty (PCT	

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Article 33(2)).

Document D1 discloses (the references between parentheses refer to that document):

a tool tip made of a CBN composite (\$1), the tool tip having a clamping cavity (3) (figure 6). It should be noted that D1 also implicitly discloses a tool tip made of PCBN.

- 3 INDEPENDENT CLAIM 4
- 3.1 The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 4 lacks novelty (PCT Article 33(2)).

Document D2 discloses (the references between parentheses refer to that document):

a method that is suitable for producing a CBN tool tip with clamping cavity, in which the relevant contour of the clamping cavity is formed by suitable shaping of the green product and the green product thus produced is dried and sintered (column 2, lines 37-39).

- 4 INDEPENDENT CLAIM 5
- 4.1 The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 5 lacks novelty (PCT)

International application No.
PCT/EP2004/00941.1

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Article 33(2)).

Document D1 discloses (the references between parentheses refer to that document):

a method that is suitable for producing a CBN tool tip with clamping cavity, in which the relevant contour of the clamping cavity is formed in the tool tip following sintering (§18).

4.2 The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 5 lacks novelty (PCT Article 33(2)).

Document D2 discloses (the references between parentheses refer to that document):

a method that is suitable for producing a CBN too! tip with clamping cavity, in which the relevant contour of the clamping cavity is formed in the tool tip following sintering (column 2, lines 30-37; claim 9).

5 DEPENDENT CLAIMS 2, 3, 6-10

Claims 2, 3 and 6-10 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step.

The additional features of these claims are either

International application No.
PCT/EP2004/009411.

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
	already known from D1 or D2 or are obvious from a				
	combination of those documents with one of				
	documents D3 - D5; see the relevant passages of				
	text cited in the search report.				
	$\cdot$				